Initial: 9/92 Reviewed/revised: 5/10/00 Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL BOARD SPLINT

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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Purpose:		Indications:	
To provide rigid splinting for a suspected fracture in an extremity		remity Suspected extremity fracture	
Advantages:	Disadvantages:	Complications: Contraindication	
Easy to apply	Soft tissue swelling can cause bandages	None	None
Readily available	holding the board in place to become too		
-	tight and restrict peripheral circulation		

Cover any open wound with sterile dressing, control bleeding; support fracture site during process

Check distal pulse, sensation and movement

Straighten any severe angulation with gentle longitudinal traction above and below break; maintain traction while splint is applied and fixed in place by EMT #2

If resistance is felt when attempting to straighten, stop attempt and splint in position found

Apply rigid splint to extremity, extending from joint above through joint below fracture site

Secure splint to extremity with bandage

Check distal circulation, sensation, and movement after splinting and frequently thereafter

Loosen bandages on splint if necessary to maintain circulation

A sling and swathe may be used to further support upper extremity injuries

NOTES:

 Fractures/injuries appropriately treated with a board splint are: radius, ulna, midshaft humerus, tibia/fibula.

Reviewed/revised: 5/10/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL HEADBED II IMMOBILIZER

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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Purpose:		Indication	ns:	
To provide rigid stabilization of the spinal column in a		Patients with a suspected potential for spinal cord		ential for spinal cord
patient with a suspected potential for spinal cord injury injury				
Advantages:	Disadvantages:		Complications:	Contraindications:
Prevent further injury	Immobilizes patient supine leaving airway easily compromised if patient vomits Straps may restrict respiratory effort		None	None

Place patient on long board

Place HeadBed II under patient's head with occipital cushion under back of head and patient's ears positioned above ear outline on HeadBed II

V

Pad as necessary behind neck to maintain neutral position (especially in children and patients with severe kyphosis)

Wrap side panels of HeadBed II up against head; EMT holding cervical stabilization holds them in place

Apply Velcro strap across forehead just above eyebrows and press onto Velcro fasteners on side panels

Pull red tabs out simultaneously and press device firmly against board

Attach one end of dual adhesive strap to underside of board, level with patient's forehead

Dry forehead as necessary

Position adhesive strap across forehead of patient over eyebrows

Secure adhesive strap to underside of long board on other side

Reasess neurologic status

Initial: 12/82

Reviewed/revised: 5/20/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL HEMORRHAGE CONTROL BANDAGING

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
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Purpose:		Indications:		
To control bleeding from an open wound		Patients who present with bleeding, open wounds		
To prevent further contamina	ition of an open wound			
Advantages:	Disadvantages:	Complications: Contraindication		
Prevents further blood loss Decreases opportunities for wound contamination	Obscures view of wound Continued hemorrhage into a bulky dressing may go unrecognized	Injury to surrounding soft tissue Circumferential bandage may become venous tourniquet if soft tissue swelling occurs	None	

Expose wound and assess potential damage

Control hemorrhage with direct pressure and elevation of site (if possible)

Assess distal circulation, sensation and movement if wound is on extremity or potentially involves spinal cord

Maintaining sterility, apply gauze dressing pad, covering entire wound

Secure dressing pad with tape or roller bandage, applying gentle even pressure

Monitor distal circulation, sensation and movement after bandaging wounds on an extremity

Splint area as necessary to prevent motion

Continue to evaluate patient's condition

Reviewed/revised: 5/10/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL KENDRICK EXTRICATION

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
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DEVICE

Purpose:		Indications:		
spine during movement of	provide rigid stabilization of the cervical and thoracic plane during movement of a patient with a suspected plane injury from a sitting to supine position Any patient with a possible spinal injury, for a sitting position		spinal injury, found in	
Advantages:	Disadvantages:	Complications: Contraindicatio		
Easy to apply Provides rigid stabilization of head and spine when properly applied	Chest and abdominal straps may restrict respirations Obscures visualization of back and sides	Use of the chin strap prevents patient from opening mouth if vomiting occurs	None	

Maintain stabilization of head, supporting in a neutral position until head is secured in KED (or in position found if resistance is encountered when attempting to return head to neutral position)

Assess neurologic status with particular emphasis on peripheral sensation and movement

Apply rigid cervical collar of appropriate size

Slip KED behind patient without disturbing patient's position

Wrap side panels of KED around torso and slide KED up until tops of side panels are firmly engaged in patient's axillae

Fasten middle and bottom torso straps just tight enough to hold device in place

Wrap head portion of KED around patient's head, padding behind neck as needed to maintain neutral position

Secure head section with forehead straps or Kling wrapped around forehead; chin cup should not be used

Slide pelvic straps under the patient's thighs (right strap under right thigh over left thigh to left side buckle; left strap under left thigh over right thigh to right side buckle)

Tighten all straps

Tie upper extremities together with cravats to prevent injury during movement

Use support loops on KED to lift patient and slide onto a long board

Loosen pelvic straps when patient is supine

Secure patient to long board with straps

Loosen chest strap to make chest movement during respiration easier

Reassess patient's neurologic condition before and after movement

Initial: 5/21/08	
Reviewed/revised:	
Pavision:	

MILWAUKEE COUNTY EMS PRACTICAL SKILL KENDRICK-TYPE TRACTION

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
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DEVICE

Purpose:			Indications:	
To provide stabilization and anatomic position of a femur fracture		Femur fracture		
Advantages:	Disadvantages: Complications:			Contraindications:
Decreases pain, muscle	Application may	Straps holding the splint in		Ankle dislocation
spasm	delay transport	ansport place may restrict peripheral		Knee dislocation
Prevents further damage	-	circulation if soft tissue swelling		Hip fracture
Requires only one EMT to apply		occurs		

Remove patient's footwear

Assess and record circulatoin, movement and sensation distal to fracture site

Cover any open wound with a sterile dressing; control bleeding

Apply ankle hitch tightly around the leg, slightly above the ankle

Tighten stirrup by pulling the green tabbed strap, until snug under patient's heel

Apply upper thigh system by sliding the pronged portion of buckle under the leg, at the knee, and seesaw upward until positioned in groin area; secure buckle

Cinch groin strap until traction pole receptacle is positioned in line with the iliac crest

Extend traction pole

Place traction pole along the lateral aspect of injured leg, extending approximately eight inches (one pole section) beyond the bottom of the foot

Insert pole end(s) into tractio pole receptacle

Secure yellow elastic strap around knee

Place yellow tab end of blue cinch strap (located on ankle hitch) over the dart end of traction pole

Apply traction by pulling the red tab end of cinch strap until patient comfort improves

Apply upper (red) elastic strap and lower (green) elastic strap around patient's leg and traction pole

Reviewed/revised: 5/10/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL LOG ROLL TO LONG BOARD

Approved by: Ronald Pirrallo, MD, MHSA Signature: Page 1 of 1

PRONE PATIENT

Purpose:		Indicatio	ns:	
To provide rigid stabilization of the spinal column in a patient with a suspected potential for spinal cord injury injury		with a suspected pot	ential for spinal cord	
Advantages:	Disadvantages:		Complications:	Contraindications:
Prevent further injury	Requires three knowledgeable re- Immobilizes patient supine leaving easily compromised if patient vo Straps may restrict respiratory eff	hree knowledgeable rescuers s patient supine leaving airway mpromised if patient vomits		None
	Maintain cervical stabi	lization		

EMT#1: maintain cervical stabilization and direct the team in patient movement

Secure patient's lower extremities together

Position long board parallel to patient so back of patient's head is next to board

EMT #2 & #3: kneel on both knees on board, facing patient

EMT #2: raise patient's nearest arm over patient's head to prevent arm from obstructing roll (or place arm at patient's side with hand against thigh)

EMT #2: Place one hand on patient's farthest shoulder, other hand on hip

EMT #3: place top hand around patient's hip, bottom hand at thigh region

On signal from EMT #1, EMT #2 & #3 roll patient toward them, while maintaining spinal alignment

EMT #1: bring head into neutral position, achieving spinal alignment, as patient is rolled (If resistance to movement is felt, stabilize head in position found)

> If centering is necessary: on signal from EMT #1, slide patient with gentle, even motion while maintaining spinal alignment

> > EMT #2 or 3: apply cervical collar

EMT #2 or 3: secure body to long board

EMT #2 or 3: secure patient's head to long board

EMT #1: release manual stabilization

Reassess status of circulation, movement and sensation

Reviewed/revised: 5/10/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL LOG ROLL TO LONG BOARD

Approved by: Ronald Pirrallo, MD, MHSA Signature:
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SUPINE PATIENT

Purpose:		Indication	ns:	
	zation of the spinal column in a cted potential for spinal cord injury	· · · · · · · · · · · · · · · · · · ·		ential for spinal cord
Advantages:	Disadvantages:		Complications:	Contraindications:
Prevent further injury	Requires three knowledgeable rescuers Immobilizes patient supine leaving airway easily compromised if patient vomits Straps may restrict respiratory effort		None	None

Maintain cervical stabilization

EMT#1: maintain cervical stabilization and direct the team in patient movement

Position long board along one side of patient

EMT #2 & #3: kneel in straight line, along patient's side

EMT #2: raise patient's nearest arm over patient's head to prevent arm from obstructing roll (or place arm at patient's side with hand against thigh)

EMT #2: Place one hand on patient's farthest shoulder, other hand on small of back

EMT #3: place top hand around patient's hip, bottom hand at thigh region

On signal from EMT #1, EMT #2 & #3 roll patient toward them, while maintaining spinal alignment

Place device to ensure patient's head is in proper alignment when patient is rolled back

On signal from EMT #1, roll patient back onto device and lower arm to side

If centering is necessary: on signal from EMT #1, slide patient with gentle, even motion while maintaining spinal alignment

EMT #3: secure body to long board

EMT #2: secure patient's head to long board

EMT #1: release manual stabilization

Reassess status of circulation, movement and sensation

Initial: 9/92
Reviewed/revised: 5/10/00
Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL PRO SPLINTS

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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Purpose:		Indications:	
To provide rigid	stabilization of a suspected fracture site	Suspected fracture	
Advantages:	Disadvantages:	Complications: Contraindications	
Easy to apply	Soft tissue swelling can cause Velcro straps holding the splint in place to become too tight and restrict peripheral circulation	None	None

Cover any open wound with a sterile dressing, control bleeding; support fracture site during process

Check distal pulse, sensation and movement

Straighten any severe angulation with gentle longitudinal traction above and below break; maintain traction while splint is applied and fixed in place by EMT #2

If resistance is felt when attempting to straighten, stop attempt and splint in position found

Apply splint to extremity, extending from joint above through joint below fracture site

Secure splint to extremity with Velcro straps

Check distal circulation, sensation and movement after splinting and frequently thereafter

Loosen straps on splint if necessary to maintain circulation

A sling and swathe may be used to further support upper extremity injuries

NOTES:

• Pro splints may be used for any upper or lower extremity injury as long as the splint extends from the joint above through the joint below the fracture site.

Initial: 9/92
Reviewed/revised: 5/10/00
Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL RIGID BOARD SPLINT FOR JOINT INJURY

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
Page 1 of 1	

Purpose:		Indications:		
To provide rigid stabilization of a suspected joint fracture Suspe		Suspect	ted joint fracture	
Advantages:	Disadvantages:		Complications:	Contraindications:
Easy to apply	Soft tissue swelling can cause bandages		None	None
Readily available	holding the board in place to become too tight			
-	and restrict peripheral circulation			

Cover any open wound with a sterile dressing and control bleeding; support fracture site during process

Check distal pulse, sensation and movement

Apply padded/rigid splint across joint from bone above to bone below joint to form a triangle

Secure both ends of splint to extremity on each side of joint

Check distal circulation, sensation and movement after splinting and frequently thereafter

Loosen bandaging, crav ats if necessary to maintain circulation

A sling and swathe may be used to further support upper extremity injuries

NOTES:

• Fractures/injuries appropriately treated with a rigid board splint for a joint injury are: elbow, knee.

Reviewed/revised: 5/10/00

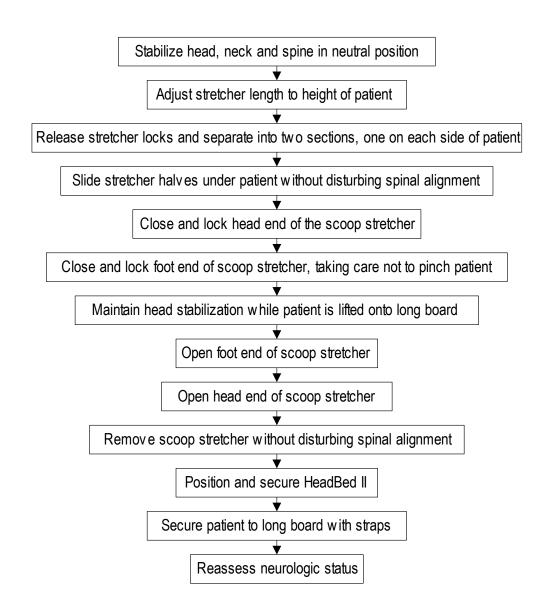
Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL MOVEMENT OF A SUPINE

Approved by: Ronald Pirrallo, MD, MHSA Signature:
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PATIENT USING A SCOOP STRETCHER

Purpose:		Indications:		
To enable movement of a patient with a suspected spinal cord		Patients with a suspected potential for		
injury while maintaining rigid stabilization of the spinal column		spinal cord injury		
Advantages:	Disadvantages:		Complications:	Contraindications:
Enables movement of patient to long board with spinal stabilization Prevent further injury	Immobilizes patient supine leaving airway easily compromised if patien vomits Straps may restrict respiratory effort	t	Pinched skin	None



Reviewed/revised: 10/15/08

Revision: 3

MILWAUKEE COUNTY EMS PRACTICAL SKILL SLING AND SWATHE

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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Purpose:		Indications:		
To immobilize the shoulder girdle and upper extremity		Fractur	e/dislocation/injury to	the upper extremity
Advantages:	Disadvantages:		Complications:	Contraindications:
Easy to apply	Patient must be in sitting po	osition	None	None
Supports the shoulder girdle	Does not provide rigid prote	ection		
and upper extremity well	by itself			

Check distal circulation, sensation, and movement

Fold forearm of injured side across chest, hand slightly elevated toward opposite shoulder

Place triangular bandage under and over arm with point at elbow and ends tied around neck

Pin or tie pointed end of triangular bandage to form cup to support elbow

Leave fingers exposed to check circulation

Wrap wide bandage/cravat around injured arm and body as swathe to secure injured arm to body

Transport in sitting or semi-sitting position if patient's condition permits

Check distal circulation, sensation and movement after splinting and frequently thereafter

NOTES:

- Fractures/injuries appropriately treated with a sling and swathe are: clavicle, scapula, shoulder dislocation, humerus.
- A sling and swathe may also be used as a support for board splints on the elbow, forearm, or wrist.

Reviewed/revised: 5/10/00

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL SPINAL STABILIZATION

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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Purpose:		Indication	ns:	
To provide rigid stabilization of the spinal column in a		Patients with a suspected potential for spinal cord		
patient with a suspected potential for spinal cord injury		injury		
Advantages:	Disadvantages:		Complications:	Contraindications:
Prevent further injury	Immobilizes patient supine leaving airway		Pressure sores	None
	easily compromised if patient vomits		due to long	
	Straps may restrict respiratory effort		transport times	

Stabilize head & C-spine in neutral position with manual stabilization at base of skill with fingers under jaw

Pad as necessary under shoulders in pediatric patients or behind neck of patients with marked kyphosis to keep C-spine in neutral position

Maintain stabilization until patient is secured on long board

Use appropriate technique/adjunct to maintain airway

Select appropriate size cervical collar for patient

Slip C-collar under patient's neck without flexing head

Apply collar without releasing stabilization; close straps

Restrain patient's extremities appropriately

Move patient to long board using appropriate technique

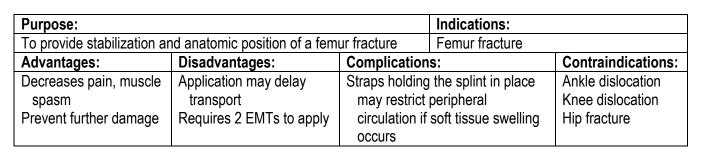
Reassess neurologic status

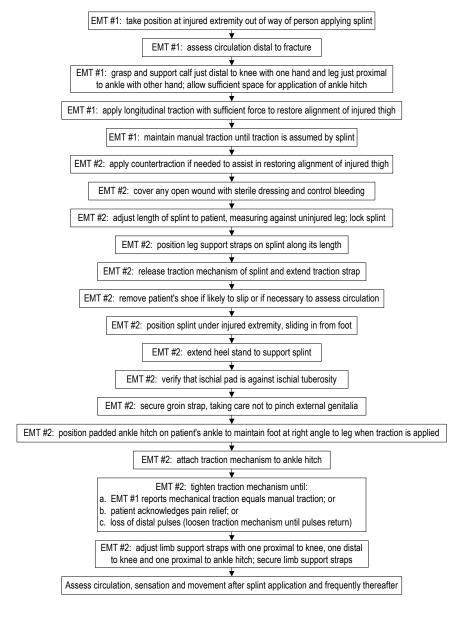
Reviewed/revised: 9/24/03

Revision: 2

MILWAUKEE COUNTY EMS PRACTICAL SKILL TRACTION SPLINTING

Approved by:	Ronald Pirrallo, MD, MHSA
Signature:	
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NOTES:

 If the unit is not equipped with a pediatric traction splint, two padded board splints may be applied.